

ABSTRACT OF THE DISCLOSURE

The invention encompasses epoxies, epoxy systems, and methods of forming conductive adhesive connections between electrical nodes. In one aspect, the invention includes a method comprising: a) providing a first node; b) providing a second node; c) providing a liquid conductive epoxy mixture between the first and second nodes, the liquid conductive epoxy mixture comprising a first liquid and a second liquid, the liquid conductive epoxy mixture having sufficient conductivity that a 15 mil length sample of the liquid conductive epoxy having cross-sectional dimensions of 50 mil by 2 mil would have a resistance of less than about 100 ohms along its length between about 10 minutes and about 20 minutes of combining the first and second liquids; and d) curing the liquid conductive epoxy to form a conductive adhesive connection between the first node and the second node. In another aspect, the invention includes an epoxy comprising: a) a liquid mixture of a hardener and a base epoxy; and b) a concentration of an ionic salt within the liquid mixture, the concentration of the ionic salt being high enough that a 15 mil length sample of the liquid mixture having cross-sectional dimensions of 50 mil by 2 mil would have a resistance of less than about 100 ohms along its length in less than or equal to about 30 minutes of forming the liquid mixture.